IN THE CLAIMS:

1. (previously presented) A method of increasing IL-2 production in systemic lupus erythematosus T cells in a patient that has systemic lupus erythematosus comprising:

administering gene-modified T cells to said patient, said T cells originating from said patient and having been gene modified by treating them with antisense cAMP response element modulator (CREM) plasmid thereby increasing the expression of IL-2 in said T cells in said patient.

2.- 9. (cancelled)

10. (Previously presented) A method of increasing IL-2 production in systemic lupus erythematosus lymphocytes in a patient having systemic lupus erythematosus comprising:

a) removing said lymphocytes from said patient;

b) leukophoresing said lymphocytes;

c) transfecting said leukorpheresed leukophoresed lymphocytes with plasmid vectors containing anti-sense cAMP response element modulator; and

d) re-infusing said transfected lymphocytes into the patient to increase IL-2 production in said lymphocytes in said patient.

11. (previously presented) The method of claim 10, wherein said antisense cAMP response element modulator, is α-antisense cAMP response element modulator that prevents CREM mRNA from being transcribed and forming CREM protein.

12.-14 (cancelled)

15. (previously presented) The method of increasing IL-2 production in systemic lupus erythemotosus T cells in a patient that has systemic lupus erythemotosus comprising: administering T cells from said patient that have been modified ex vivo to have decreased cAMP response element modulator mRNA to said patient.

16-28 (cancelled)

29. (previously presented) A method of increasing IL-2 production in T cells from a systemic lupus erythematosus patient comprising:

removing said T cells from said patient; and

treating said T cells with antisense cAMP response element modulator (CREM); to increase IL-2 production in said T cells.

30. (previously presented) A method of increasing IL-2 production in lymphocytes from a systemic lupus erythematosus patient comprising:

a) removing said lymphocytes from said patient;

b) leukophoresing said lymphocytes;

c) transfecting said leukophoresed lymphocytes with plasmid vectors containing anti-sense cAMP response element modulator to stop the expression of cAMP response element modulator and increase IL-2 production in said lymphocytes.